



ATES ENVIRONMENTAL PROTECTION AGENCY

July 20, 2017

Mr. Anthony R. Brown
Environmental Manager
Atlantic Richfield Company
4 Centerpointe Drive, LPR 4-435
La Palma, CA 90623-1066

Re: EPA Review of ARC February 28, 2017 Response to EPA Comments on the Final Baseline Human Health Risk Assessment Work Plan, Revision 2; and April 21, 2017 TSAP for Bioaccessibility Testing Remedial Investigation and Feasibility Study, Leviathan Mine Site, Alpine County, California

Dear Mr. Brown,

The US Environmental Protection Agency (EPA) has reviewed Atlantic Richfield Company's (ARC) February 28, 2017 Response to EPA Comments on the Final Baseline Human Health Risk Assessment Work Plan, Revision 2; and April 21, 2017 TSAP for Bioaccessibility Testing Remedial Investigation and Feasibility Study, Leviathan Mine Site, Alpine County, California. This work was submitted to EPA pursuant to Administrative Order for Remedial Investigation and Feasibility Study, Leviathan Mine, Alpine County, California (CERCLA Docket No. 2008-18, June 23, 2008).

Background: ARC's February 28, 2017 submittal was in response to EPA's December 29, 2016 acceptance of the subject document. ARC's April 21, 2017 TSAP was a voluntary submission to describe a new bioaccessibility sampling event to EPA.

EPA has completed its review of these two submittals, and provides the following comments:

- **ARC's February 28, 2017 Submittal:** EPA has no further comments. EPA's December 29, 2016 letter accepting the Human Health Risk Assessment workplan remains unchanged.
- **ARC's April 21, 2017 Bioaccessibility TSAP:**
The document describes collection of 10 samples from each of five different media. The TSAP indicates that the samples will be sieved at the laboratory to obtain the <250 micron portion of the soil sample for nine metals (antimony, arsenic, barium, copper, iron, lead, manganese, selenium, and thallium).

Please ensure that this data is not used to assess the bioaccessibility in previously collected unsieved samples.

The bioaccessibility information collected from these proposed sieved samples will be considered applicable only to those samples that were previously sieved (the <250 micron portion soil sample) for laboratory analysis. A majority of the samples were not sieved at all, and this data is not applicable to those samples

EPA has also attached comments dated June 29, 2017 prepared by the Regional Board and concurs with these comments:

- **Arsenic Concentrations:** Page 5, Section 5.0 first paragraph – Please specify both the numeric range of arsenic concentrations detected in samples from other investigations, as well as the range of arsenic concentrations to be evaluated under this Work Plan. Please explain the rationale to use arsenic as an indicator for other metals related to mine waste.
- **Table 3, Field Sampling Plan Summary for Bioaccessibility** Please verify that there is a cut into native materials on each transect. The road reference sample is to be collected from that portion of the transect that constitutes an excavated cut slope into native ground, and the road sample is to be collected from that portion of the transect that constitutes the travel way for vehicular traffic (not including shoulders).
There are only nine sample locations for the Leviathan Mine Road, however the work plan states that ten samples from each media will be evaluated, please clarify.

Please provide a response to these comments prior to implementing the field sampling.

EPA and ARC have agreed upon an RIFS schedule and reporting structure; per EPA letter dated May 17, 2017.

If you have any questions, please feel free to contact me at (415) 947-4183 or Deschambault.lynda@epa.gov.

Sincerely,

A handwritten signature in cursive script that reads "Lynda Deschambault". The ink is dark and the signature is fluid, with the first name "Lynda" being larger and more prominent than the last name "Deschambault".

Lynda Deschambault
Remedial Project Manager

Cc by electronic Email:

Douglas Carey, California Regional Water Quality Control Board, Lahontan Region
Scott Ferguson, California Regional Water Quality Control Board, Lahontan Region
Norman Harry, Washoe Tribe of Nevada and California
David Friedman, Nevada Department of Environmental Protection
Kenneth Maas, United States Forest Service
Tom Maurer, United States Fish and Wildlife Service
Toby McBride, United States Fish and Wildlife Service
Steve Hampton, California Department of Fish and Wildlife
Marc Lombardi, AMEC